



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Department of Administrative Services

KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON
Director

ADDENDUM No. 1

Date: March 23, 2009

To: Contractors

From: Wayne Smith, Project Manager, DFCM

Reference: Springville Readiness Center Upgrade
Utah National Guard
DFCM Project No. 08032470

Subject: **Addendum No. 1**

Pages	Addendum Cover Sheet	1 page
	<u>Architect's Addendum</u>	<u>12 pages</u>
	Total	13 pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

1.1 **SCHEDULE CHANGES:** No schedule changes.

1.2 **GENERAL ITEMS:** See attached Architect's Addendum

ADDENDUM #1
RENOVATION OF READINESS CENTER
125 SOUTH 700 EAST
SPRINGVILLE, UTAH

SHEET AE101

1. Revise Keyed Note 26 to read as follows. See also attached as-built drawing for location of existing pipe tunnel (for reference only). Relocate keyed note 26 to the northeast corner of tool storage 109 and in office 106 as shown on attached partial AE101.
26. ACCESS DOOR TO EXISTING PIPE TUNNEL BELOW FLOOR FOR TYING INTO SEWER & WATER LINES
2. Delete "UPPER ENCLOSED PLAN" This work will be done by the Guard. Contractor to still complete demolition called out by note 3 on AD101.
3. Delete Keyed Note 14.

SHEET AE402

1. Delete Detail 5/402. The Guard will demolish these walls in lieu of bracing them.

SHEET AE501

1. Revise finish schedule for the drill hall to show the walls and ceiling and beams all get painted. Revise the Misc. Notes 1 at the bottom of the finish schedule on Sheet AE501 to read as follows:
 1. REPAINT WALLS UP TO CEILING APPROXIMATELY 20' A.F.F. AND ENTIRE CEILING, BEAMS & COLUMNS.

MECHANICAL

1. See attached VanBoerum & Frank Associates Addendum.
2. Add the following note to detail 3/P501:
Refer to detail 2/ME303 on sheet M502 for seismic strapping of water heater.

ELECTRICAL

1. See attached Spectrum Engineers Addendum.

SPECIFICATIONS

1. Add the following to section 099123 – 3.2 C:
Caulk cracks with paintable elastomeric sealant.
2. Add Flush Metal Partitions Inc. as an approved manufacture for toilet partitions in Section 102113 - 2.2 A Manufactures:
3. Add Thermal Window Systems as an approved manufacture in Section 084113, Aluminum Windows

4. Add Interface as an approved carpet manufacture for carpet tile – Section 096813–2.1 under state contract #MA1864. Carpet must be equal to that specified.
5. Add Columbia as an approved manufacture for toilet accessories – Section 102800-2.1
6. Revise the following sections as noted:

SECTION 017300 “EXECUTION” and SECTION 024119 “SELECTIVE STRUCTURE DEMOLITION”

1. Delete 017300 1.3.A and 024119 1.7.D and replace with the following:

A or D. Hazardous Materials: Hazardous materials are present in the building. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.

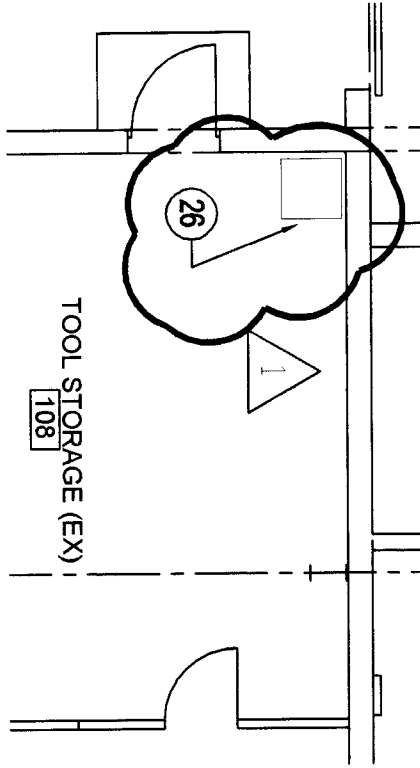
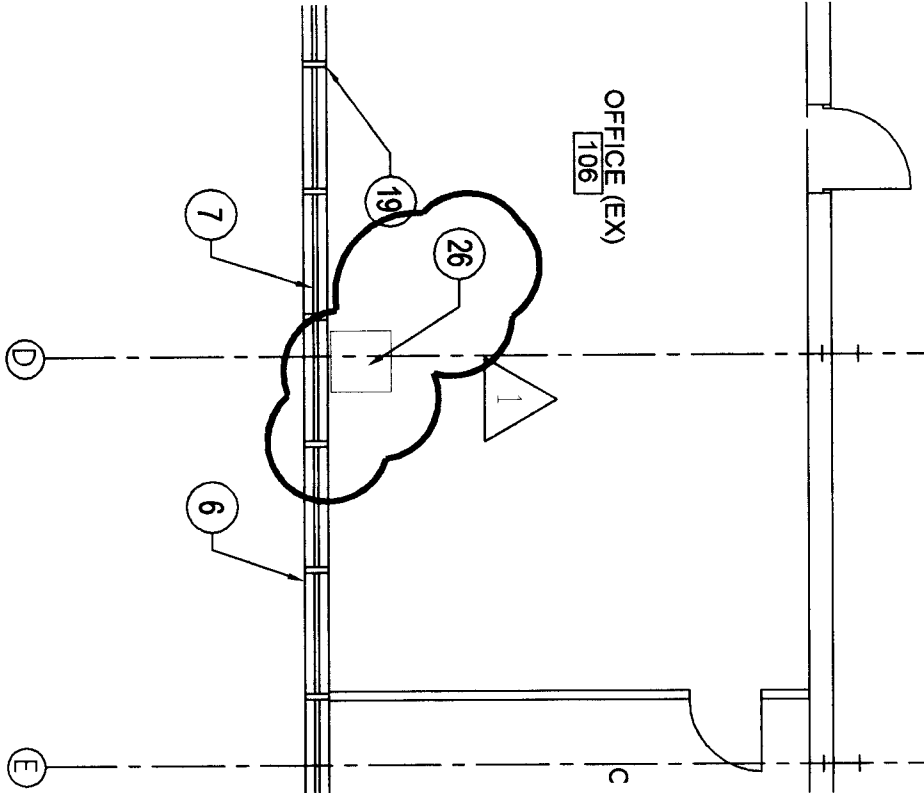
1. Hazardous materials will be removed by Owner under a separate contract, with the exception of fluorescent light tubes and PCB ballasts. Removal may occur before and/or during work of this Contract. See Division 01 Section “Summary” for requirements related to cooperation and coordination with separate contractors under other contracts.
2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner.
3. Comply with State of Utah Department of Health Division of Solid and Hazardous Waste standards and regulations for removal and disposal of fluorescent light tubes and PCB ballasts.

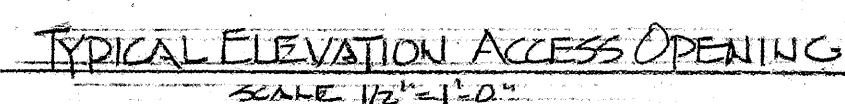
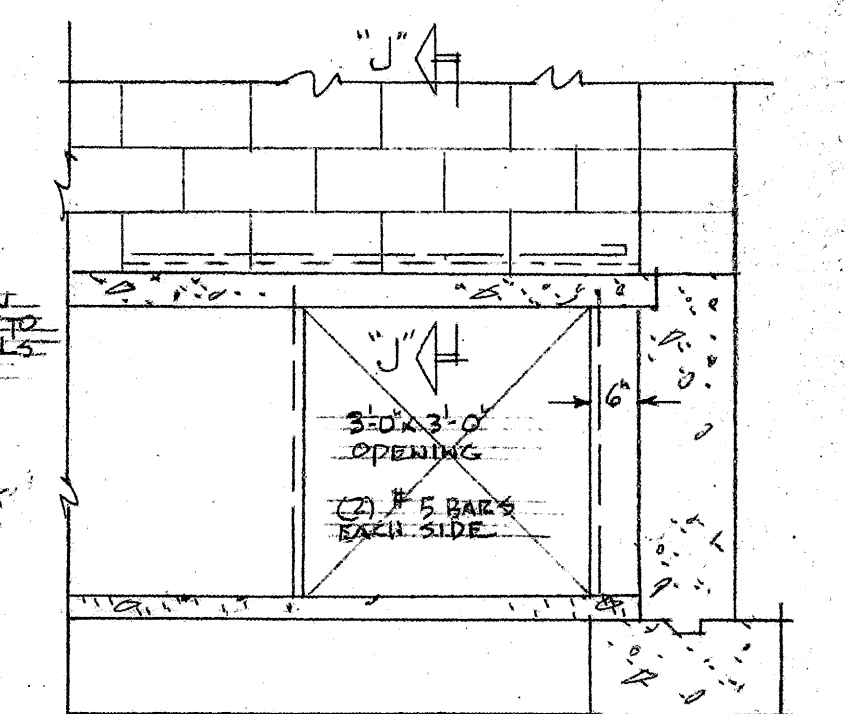
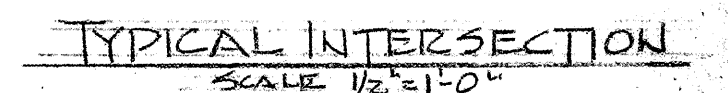
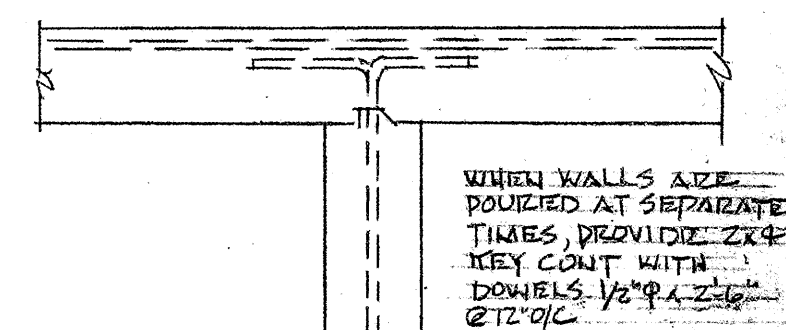
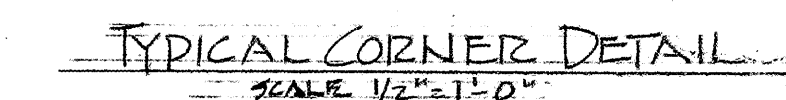
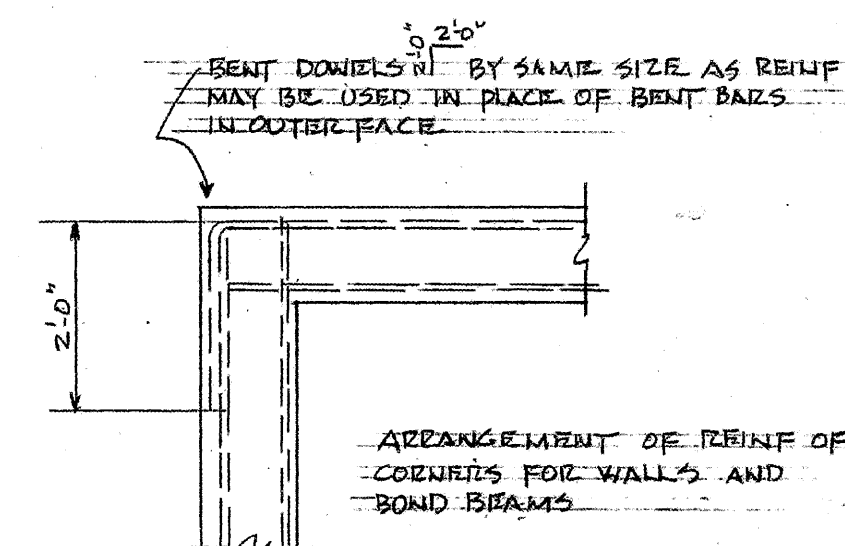
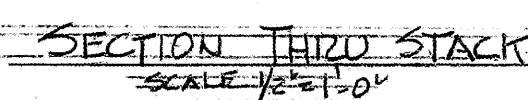
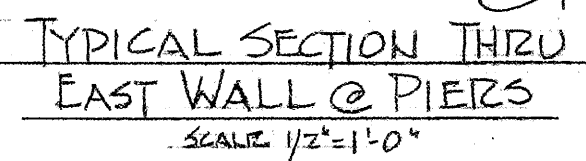
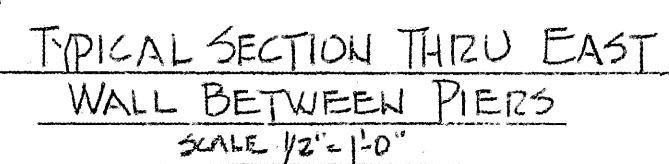
MISCELLANEOUS CLARIFICATIONS

1. Roof replacement for this building will be by separate contract. Depending on availability of funding the roof replacement may occur concurrent with this project. See Division 01 Section “Summary” for requirements related to cooperation and coordination with separate contractors under other contracts.
2. The contractor is responsible to protect all existing finishes from damage during construction, including the assembly hall floor during removal of mechanical equipment. See Section 024119 - 3.3 – B – 3.

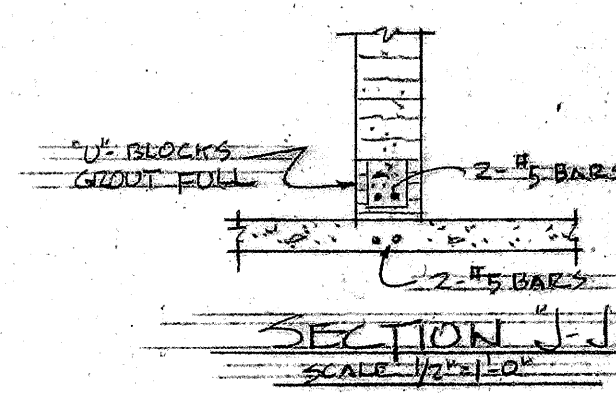
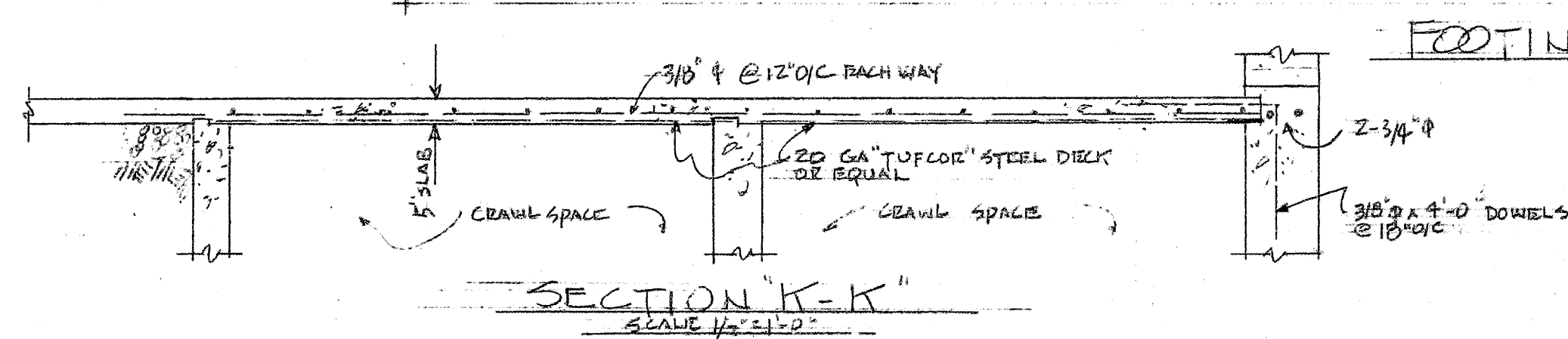
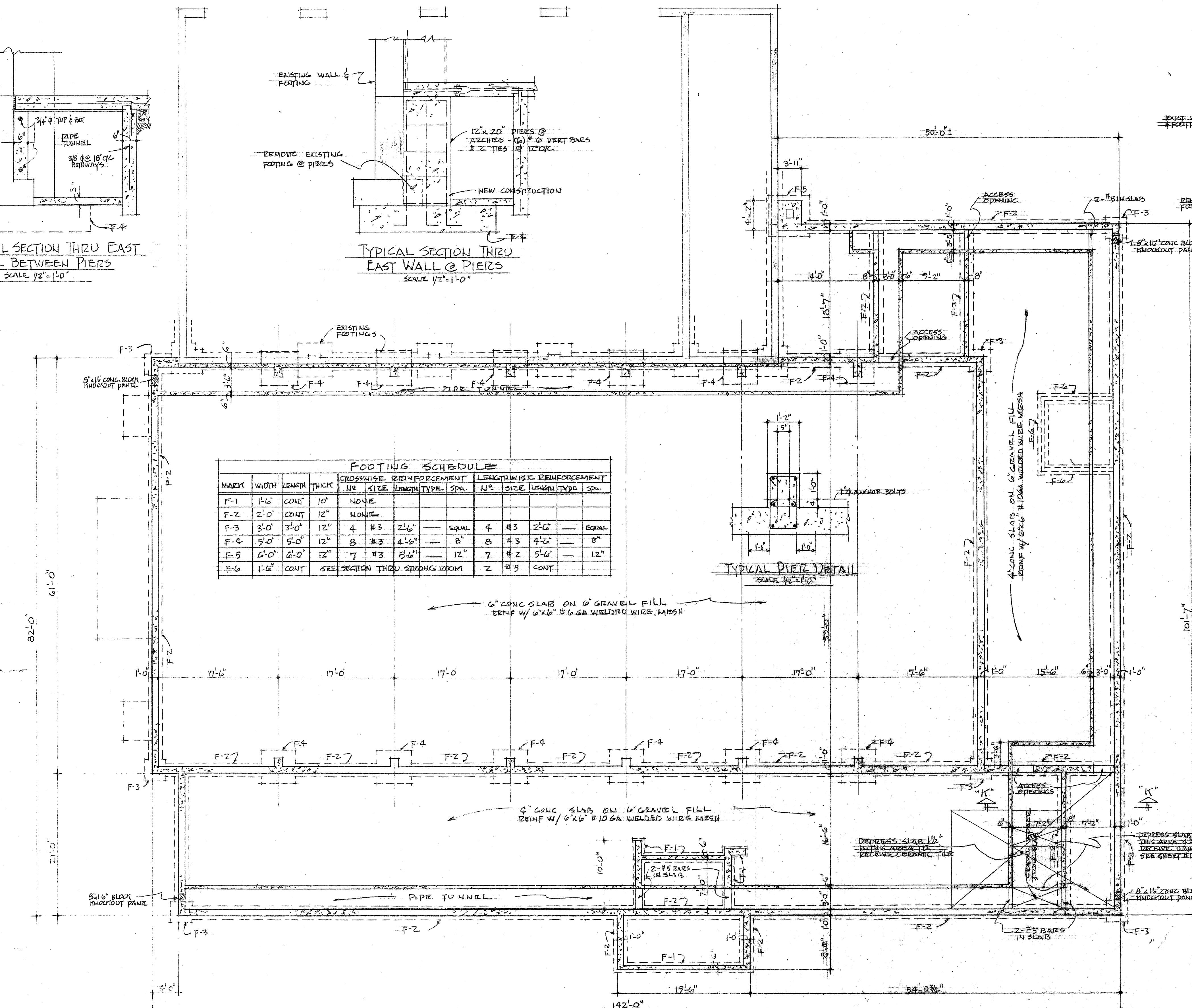
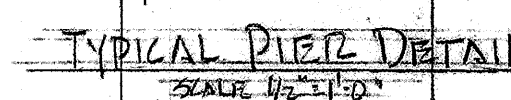
ADDENDUM #1
RENOVATION OF READINESS CENTER
125 SOUTH 700 EAST
SPRINGVILLE, UTAH

Partial 1st Floor Plan AE101





FOOTING SCHEDULE													
MARK	WIDTH	LENGTH	THICK	CROSSWISE REINFORCEMENT					LENGTHWISE REINFORCEMENT				
				N ^o	SIZE	LENGTH	TYPE	SPA.	N ^o	SIZE	LENGTH	TYPE	SPA.
F-1	1'-6"	CONT	10"	NONE									
F-2	2'-0"	CONT	12"	NONE									
F-3	3'-0"	3'-0"	12"	4	#3	2'-6"	---	EQUAL	4	#3	2'-6"	---	EQUAL
F-4	5'-0"	5'-0"	12"	8	#3	4'-6"	---	8"	8	#3	4'-6"	---	8"
F-5	6'-0"	6'-0"	12"	7	#3	5'-6"	---	12"	7	#2	5'-6"	---	12"
F-6	1'-6"	CONT	SEE	SECTION THRU STRIP FOUND.					2	#5	CONT		



FOOTING & FOUNDATION PLAN
NATIONAL GUARD ARMORY
- SPRINGVILLE - UTAH
STATE OF UTAH - STATE ARMORY BOARD
DEPT OF ARMY - NATIONAL GUARD BUREAU
ROBERT L. SPRINGMEYER
ARCHITECT - DALLAS, TEXAS
AND ASSOCIATES
G-17, ZION'S SAVINGS BANK BLDG
SALT LAKE CITY UTAH

DATE	6/15/56
REVISION	
DRAWN BY	DMH
CHECKED BY	RLS
SHEET NO.	2

ADDENDUM

DATE: March 23, 2009

PROJECT NO: 8365

PROJECT: Utah National Guard,
Springville Readiness Center

DIVISION - 23

DRAWINGS

SHEET - M201

1. Provide new ATC Control valve for new air handler AH-1, in existing boiler room. Confirm exact location. Coordinate with controls contractor.
2. Add to Key Note 3, **"Provide refrigeration piping between indoor unit and outdoor air cooled condensing unit on the roof. Patch and repair any required roof penetration to maintain roof warranty."**
3. Add Key note 10, **"Provide new roof mounted exhaust fan. Provide new curb as required by manufacturer. Patch and repair roof to maintain roof warranty"** This note shall apply to all exhaust fans shown on this sheet.
4. Add Key Note 11, **"Install new air handler in same location as existing air handler. Extend new outside air duct from new unit up through roof in similar fashion as existing. See detail 15/M501. Patch and repair roof as required to accommodate new duct to maintain roof warranty. Make connection of heating hot water supply and return piping. Make electrical connections as required. Provide new controls for new air handler. Mount new unit from building structure. Provide flexible connections to duct and piping."** This note shall apply to new air handler AH-1.
5. The thermostat indicated in key note 6 will control the existing hot water heating radiators in the rooms indicated.

SHEET - M502

1. Detail 4, Automatic valve (ATC) shall be min. 1 ½" min.
2. Provide thermometers on piping as indicated.

SHEET - M601

1. Rooftop Unit Schedule – add the following notes to the schedule.
 - a. Provide with winter start kit and low ambient controls to 0 deg. F.
 - b. Refrigerant shall be R-410a
 - c. Gas heat shall be high, 2-stage.
 - d. Provide a factory installed, non-fused disconnect.

SHEET - P201

1. Add to Key Note 7, **"Saw cut floor as required to install trap primers and under floor piping. Patch and repair to match surroundings."**
2. In Custodian 128 the fixture is SS-1. Use faucet as specified for SS-1.
3. Large Scale Waste and Vent Plan, Provide 4" sanitary vent through roof.
4. Add general note, **"Piping sizes and routing shown are based on the best available information and site observations. Contractor shall field verify all dimensions, sizes, locations and conditions prior to submitting bid."**

March 20, 2009

Page 2 of 7

SHEET – P501

1. Detail 2/P501: Thermal Expansion Tank Shall be DET-1

SPECIFICATIONS

SECTION - 237330 – Modular Indoor Air Handling Units

1. See attached specification section.

PRIOR APPROVALS

The following manufacturers, trade names and products are allowed to bid on a name brand only basis with the provision that they completely satisfy all and every requirement of the drawings, specifications and all addenda shall conform to the design, quality and standards specified, established and required for the complete and satisfactory installation and performance of the building and all its respective parts.

<u>Item</u>	<u>Manufacturer</u>	<u>Comments</u>
Shower SH-2	Acorn/Symmons	
Sensor Faucet L-1	Chicago	
Mixing Valve L-1	Symmons	
Air Handler AH-1	Team Air	

SECTION 237330 - MODULAR INDOOR AIR HANDLING UNITS

GENERAL

SUMMARY

1. Includes But Not Limited To:
 - A. Furnish and install custom air handling units as described in Contract Documents.
2. Products Installed But Not Supplied Under This Section:
 - A. Control valve.
 - B. Low limit control Freeze stats.

SUBMITTALS

3. Product Data:
 - A. Indicate dimensions, weights, capacities, fan capacities, fan performance, motor electrical characteristics, casing construction details, wiring interconnections, gauges, and finishes of materials.
 - B. Indicate filter sizes and quantities, and filter frames.
 - C. Provide coil selection work sheets showing proper consideration for altitude, air density, and fouling factor.
 - D. Manufacturer installation instructions.
 - E. Fan curves with specified operating point clearly plotted.
 - F. Sound power levels for air handling unit(s) at scheduled conditions.
 - G. Include instructions for lubrication, filter replacement, motor and drive replacement, spare parts list, and wiring diagrams.
4. Close-Out:
 - A. Record Documents:
 - 1) Show unit configuration in direction of airflow.
 - 2) Indicate assembly and unit dimensions.

QUALITY ASSURANCE

5. Certification Requirements:
 - A. Certify air handling unit capacity, static pressure, fan speed, brake horsepower, and selection procedures in accordance with ARI 430-89.
 - B. Certify air coils capacities, pressure drops and selection procedures in accordance with ARI 410-87.
 - C. Certify sound power levels for air handling unit(s) at scheduled conditions.
 - D. Units with factory wiring shall be UL/ETL/CSA Approved.

DELIVERY, STORAGE, AND HANDLING

6. Deliver air handlers to site on factory-installed 6 inch high base rail, bolt on legs are not acceptable.

MAINTENANCE

7. Extra Materials: In addition to construction set, provide one additional set pleated media filters and one set of cartridge filters.

PRODUCTS

MANUFACTURED UNITS

8. Air Handling Units :(Approved Manufacturers: Carrier, Trane and York)
9.
 - A. Casing:
 - 1) Construct non-load exterior panels of minimum 16 ga galvanized steel.
 - a) Removal of exterior panels shall not affect structural integrity of unit.
 - b) Apply final shop coat zinc rich protective paint to units with welds on exterior surfaces or welds that have burned through from interior welds. Manufacturer's standard color.
 - c) Walls constructed of 2 inches thick acoustical thermal panels, with an R-value of no less than 13..
 - 2) Insulate sections handling conditioned air with 2 inches 1.5 lb / cu ft double density matt faced fiberglass covered with inner panel of 18 ga minimum perforated galvanized steel. Install insulation using adhesive. Insulation edges protected with metal lagging, with an R-value of not less than 13..
 - 3) For routine service access, supply unit with hinged, access doors.
 - a) Continuously welded corners on doors.
 - b) Insulation as specified above.
 - c) Doors shall be fully gasketed with continuous 1/2 inch closed cell hollow, round, black gasket with metal encapsulated reinforced backing mechanically fastened to door frame.
 - d) Doors shall be a single piece, sealed, double wall construction, 2 inches thick with and R-value of no less than 13.
 - 4) Base shall be constructed from structural steel 4 inch minimum channel iron around perimeter of unit with intermediate channel and angle iron supports.
 - a) Provide base with lifting lugs.
 - 5) Casing deflection 1:200 ratio when subject to +-5 inches w.g.
 - 6) All sections, doors, top, bottom, walls shall have a thermal break.
 - B. FANS (See Schedules)
 - 1) The fans shall be of the centrifugal plenum or as scheduled, designed without a scroll type housing. Fans shall incorporate a wheel, heavy gauge reinforced steel inlet plate with removable spun inlet cone, structural steel frame, and shaft and bearings in AMCA Arrangement 3 configuration to form heavy duty integral unit.
 - 2) All fan wheels shall have tapered spun wheel cones or shrouds providing stable flow and high rigidity. The wheels shall be non-overloading type.

- 3) The blades shall be continuously-welded, die-formed Airfoil type, designed for maximum efficiency and quiet operation. Partial welding will not be acceptable on airfoil blades.
- 4) Impellers shall be statically and dynamically balanced and complete fan assembly shall be test balanced at the operating speed prior to shipment.
- 5) Shafts are to be AISI C-1018, 1040 or 1045 hot rolled steel accurately turned, ground, polished, and ring gauged for accuracy.
- 6) Shafts to be sized for first critical speed of at least 1.43 times the maximum speed for the class. Bearings are to be heavy duty, grease lubricated, anti-friction ball or roller, self-aligning, pillow block type and selected for minimum average bearing life (AFBMA L-50) in excess of 200,000 hours at the maximum class RPM.
- 7) Cantilevered vane blades are to be used through Size 490 to minimize air performance insertion losses and noise. Operating mechanism shall be out of the inlet airstream.

C. Motors and Drives:

- 1) Drive sheaves shall be machined cast iron.
- 2) Sheave selections and belt lengths shall be in accordance with drive manufacturer for specific motor loads being encountered.

D. Coils:

- 1) Provided by same company as supplier of air handling units and designed with aluminum plate fins and copper tubes.
- 2) Fins shall have collars drawn, belled, and firmly bonded to tubes with mechanical expansion of tubes.
 - a) Soldering or tinning shall not be used in bonding process.
 - b) Mount coils in unit casing to be accessible for service and can be removed from unit through side or top.
 - c) Capacities, pressure drops, and selection procedure shall be certified in accordance with ARI Standard 410.
 - d) All coils shall be coated with Heresite.
- 3) Provide factory installed extended drain and vent connections for water coils.
- 4) Water Heating Coils:
 - a) Enclosed in coil section.
 - b) Coil headers and U-bends shall not be exposed.
 - c) Water flow counter to airflow.
 - d) Provide supply header to ensure distribution of hot water to each tube of coil.
 - e) Proof tested to 300 psig and leak tested to 200 psig air pressure under water.
 - f) 5/8 inch outside dimension tubes, with minimum 0.025 inch wall thickness.
 - g) Coordinate coil connections with Drawings for access.
 - h) Coils shall be drainable.

E. Filters:

- 1) Provide factory-fabricated flat filter section of same construction and finish as unit casing with filter guides and hinged, access doors with automotive style gasket for minimum leakage for filter removal.

- a) Provide filter rack for 2 inch thick filters where shown. Rack shall be of galvanized steel and equipped with gaskets to limit leakage to less than 3 percent.
- b) Fabricate filter boxes to flange to other unit components.
- c) Provide blockouts as required to prevent air bypass around filters.

F. Dampers:

- 1) Internally mounted outside air, return air, and exhaust air dampers.
 - a) Air foil design and galvanized construction.
 - b) Parallel or opposed blade type with metal compressible jamb seals and extruded vinyl blade edge seals on all blades.
 - c) Blades shall rotate on stainless steel sleeve bearings.

FABRICATION

- 10. Fabricate draw-through type air handling units suitable for scheduled air pressure operation.
- 11. Fabricate units with supply fan sections, coil section, mixing box section, filter section and discharge plenum.
- 12. Permanently join flanged panel surfaces and seal with individual strip sealer tape.
- 13. Size spring isolators to provide 99 percent isolation efficiency.

SOURCE QUALITY CONTROL

- 14. Factory-fabricate and test air handling units of sizes, capacities, and configuration in accordance with Contract Documents.
- 15. On units not shipped fully assembled, tag each section to indicate location in direction of airflow to facilitate assembly at job site.
- 16. Base performance on altitude conditions.

EXECUTION

INSTALLATION

- 17. Furnish and install vibration isolation units on mounting rods at load points indicated by unit manufacturer. Size shall be as recommended by unit manufacturer.
- 18. Level unit.
- 19. Thoroughly seal and calk pipe and conduit penetrations to casing.

ADJUSTING

- 20. Check and align access doors to ensure smooth operation.

21. At start-up, check fan motor for rotation and amp draw for each phase. Mark reading on fan scroll.
22. Adjust belt drives for tension and alignment.

PROTECTION

23. Do not operate units until filters are in place, bearings lubricated, and fan has been test run under observation.

END OF SECTION



Addendum #1

To:	Jerry Aurich	Telephone:	(801) 521-8564
Company:	EFT Architects	Fax:	(801) 355-2938
	265 East 100 South, Suite 350	Copies to:	File
	Salt Lake City, Utah 84111		
From:	David Affleck	Telephone:	801-401-8473
Job:	Springville Readiness Center	Toll Free:	800-678-7077
Re:	Addendum #1	Fax:	801-401-9473
Job Number:	20080419	E-mail:	dla@spectrum-engineers.com
Date:	March 23, 2009	Page:	1 of 1

DISTRIBUTED VIA:

<input type="checkbox"/> Pickup	<input type="checkbox"/> Delivery	<input type="checkbox"/> Mail/Express Mail	<input type="checkbox"/> Express Shipping
<input checked="" type="checkbox"/> e-Mail	<input type="checkbox"/> Enclosure	<input type="checkbox"/> Fax	<input type="checkbox"/> Other

Addenda Items

In regards to Utah National Guard Springville Readiness Center located in Springville, Utah.

1. For clarification, the contractor shall provide the secondary service feeders from the transformer on the pole to the metering equipment. Note that the utility provider is Springville City Power and the contractor is required to coordinate all service work with Springville City Power.
2. Prior approved light fixtures are as follows:
 - a. E: Dual-Lite #UFO-6W
 - b. EOC-32: Deco Lighting #D443-42C-C-WT-EB-EMB-SCBA
3. Prior approved fire alarm manufacturers:
 - a. Mircom

We trust this is the information you require.

David Affleck, Spectrum Engineers

Spectrum Engineers, Inc.

Mechanical Engineering ♦ Electrical Engineering ♦ Technology Design ♦ Lighting Design ♦ Acoustical Engineering
Theater Design ♦ Fire Protection

SALT LAKE CITY PHOENIX ST. GEORGE

800-678-7077

www.spectrum-engineers.com